

1. A special effect image generation apparatus for processing an image to generate a special effect, comprising:

an extraction condition setting means for
extracting from the above image an image satisfying a
10 plurality of extraction conditions among luminance
extraction conditions based on a luminance signal and/or
chroma extraction conditions based on at least a color
signal;

a mixer circuit for processing the image to
convert the image to a special effect image based on said
20 signal of the image, an output signal of the image
conversion means, and the key signal.

25 further comprising a mask pattern generation
means for outputting a mask pattern for masking a region

not to be processed in said image; and

wherein said key signal output means outputs a
key signal to set said extraction conditions for said
image based on said mask pattern in addition to said
5 luminance extraction conditions and/or chroma extraction
conditions.

3. A special effect image generation apparatus as
set forth in claim 1,

10 further comprising an image conversion setting
and processing means for selecting and setting a type of
image conversion to be performed on the image and making
the image conversion means perform the selected and set
image conversion on said image; and

15 wherein the selection and setting of the type
of image conversion in said image conversion setting and
processing means and the setting of said luminance
extraction conditions and/or chroma extraction conditions
are freely and independently performed.

4. A special effect image generation apparatus as
20 set forth in claim 3,

further comprising a mask pattern generation
means for outputting a mask pattern to mask a region not
to be processed in said image; and wherein

25 said key signal output means outputs a key
signal for setting said extraction conditions for said

image based on said mask pattern in addition to said luminance extraction conditions and/or chroma extraction conditions; and

the setting and adjustment of the mask pattern
5 generated by said mask pattern generation means, the selection and setting of the type of image conversion in said image conversion setting and processing means, and the setting of said luminance extraction conditions and/or chroma extraction conditions are freely and
10 independently performed.

5. A special effect image generation apparatus as set forth in claim 1, further comprising a wave-filtering and shaping means for filtering and shaping the output signal of said extraction condition setting means.

15 6. A special effect image generation apparatus as set forth in claim 1, wherein said image conversion means reduces the number of gradients of data of said image.

7. A special effect image generation apparatus as set forth in claim 1, wherein said image conversion means
20 divides said image into blocks of uniform density.

8. A special effect image generation apparatus as set forth in claim 1, wherein said chroma extraction conditions are extraction conditions based on a luminance signal and color difference signal of said image.

25 9. A special effect image generation apparatus as

set forth in claim 1, wherein said chroma extraction conditions are decided for a two-dimensional region of a color difference value defined by a color difference signal of blue and luminance and a color difference
5 signal of red and luminance of said image.

10. A special effect image generation apparatus as set forth in claim 8, wherein said chroma extraction conditions are decided for a three-dimensional region of a color difference value and a luminance value defined by
10 a color difference of a two-dimensional region of said color difference signal and a luminance value at a predetermined position in said two-dimensional region.

11. A special effect image generation apparatus as set forth in claim 1, wherein said extraction condition
15 setting means extracts an image based on a NAM output of said luminance extraction conditions and/or said chroma extraction conditions.